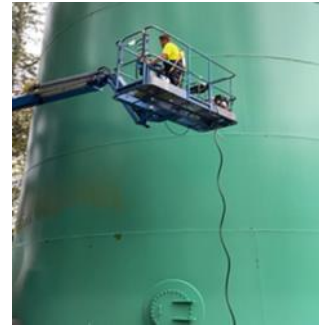




Drinking Water Quality

The 2022 Consumer Confidence Report

HIGHER STANDARDS, CLEAR RESULTS, SAFE WATER



We take great pride in our Municipal Water System and are proud to report no violations

The City of Wood Village is pleased to present our 2022 Consumer Confidence Report. This report is designed to provide information about the City's drinking water system and to provide the most recent water sample results.

The data presented in this report is a combination of analytical results from laboratories certified by the Oregon Health Authority (OHA) to perform drinking water quality testing. All drinking water, including bottled water, may contain at least small amounts of some contaminants. The presence of contaminants does not

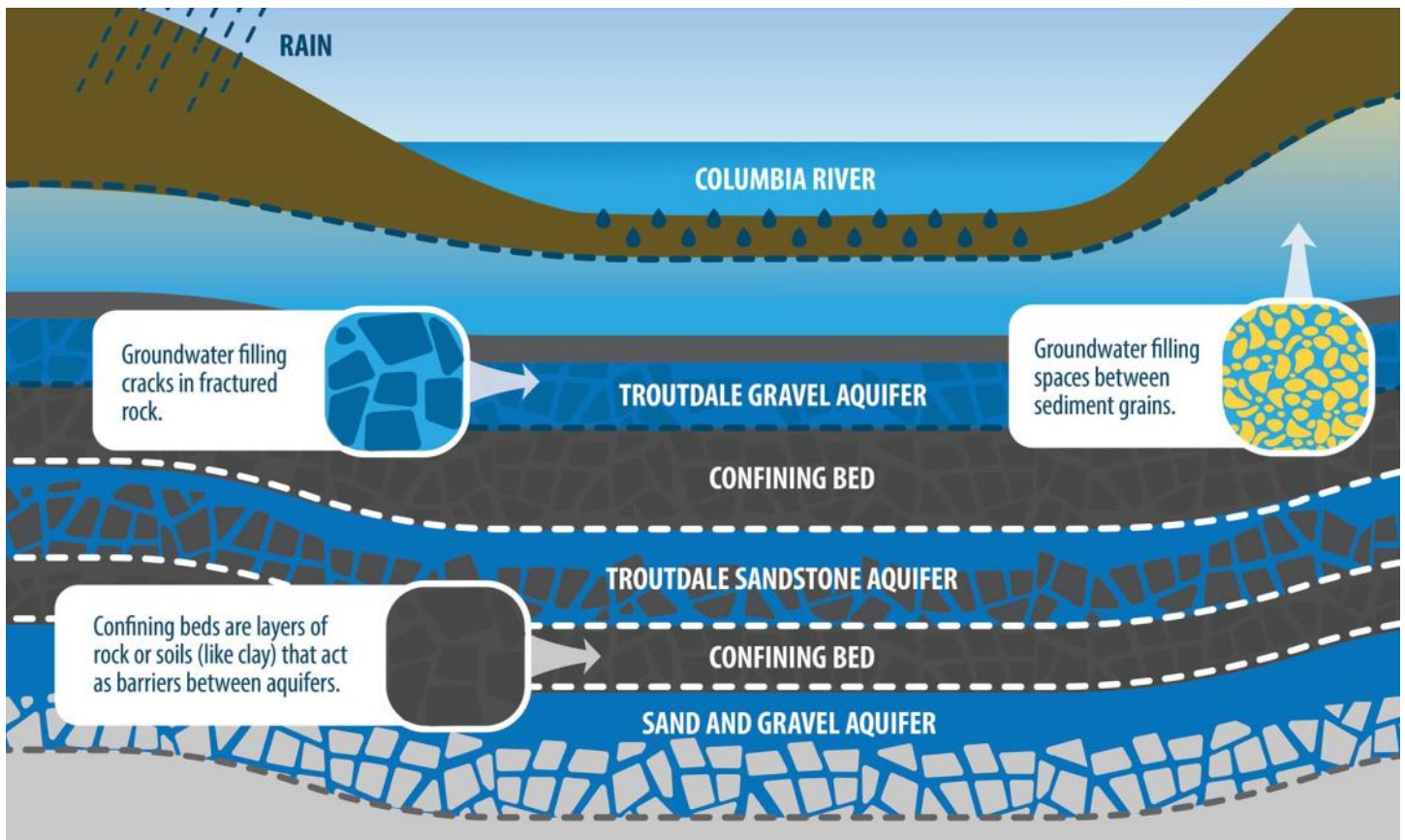
necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791). The Environmental Protection Agency (EPA) sets standards for safe drinking water and you can read about our exceptional compliance in the following pages.

If you have any questions about this report or your drinking water, please 503-667-6211 or email city@woodvillageor.gov. You may also request a free paper copy.

Este informe contiene información muy importante sobre su agua de beber.

Para pedir una copia traducido en español o otro idioma, hable a 503-489-6859.

Call 503-667-6211 or email city@woodvillageor.gov for translation in other languages.



Definitions

This report includes the following terms and acronyms you may not be familiar with.

AL (Action Level): The concentration of a harmful or toxic substance or contaminant that when exceeded is considered sufficient to warrant regulatory or remedial action.

LOQ: Laboratory analysis indicates that the contaminant is not present or that it is present at levels too low for modern laboratory equipment to detect.

MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water.

MCLG: Maximum Contaminant Level Goal: The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

pCi/L: Picocuries per liter of air, or pCi/L, which is one of the preferred measurements for the speed of decay in radon.

ppb (parts per billion): 1ppb means that one part of a particular contaminant is present for every 1 billion (1,000,000,000) parts per water. 1 ppb is equivalent to 1 inch in 16,000 miles, 1 second in 32 years and 1¢ in \$10 million dollars.

ppm (parts per million): 1ppm means that one part of a particular contaminant is present for every 1 million (1,000,000) parts per water.

µg/L: Micrograms per liter or ppb (parts per billion).

Where Does Your Water Come From?

All of the water supplied by the City of Wood Village is ground water and comes directly from three local independent wells owned and operated by the City of Wood Village. The water is pumped out of the ground and treated with chlorine disinfectant and then pumped to three nearby reservoirs for distribution to consumers.

These wells are considered deep wells and vary in depth from 300 feet to 458 feet. Two of our wells pull water from the Troutdale Sandstone Aquifer and one well pulls water from the Sand and Gravel Aquifer.



What is an Aquifer?

An aquifer is somewhat similar to an underground river or lake, except that the water flows through material such as gravel or sand. Water flows much more slowly in an aquifer than in a river because of all the sediment and rock it travels through. It's sort of like when kids dig a hole in the sand at the beach and watch the water slowly fill the hole.



Aquifers can be considered confined or unconfined. When an aquifer has a layer above and below it that doesn't let water pass, this is called a confined aquifer. The diagram on page 2 shows the layers of aquifers in our region. The Troutdale Gravel Aquifer is considered an unconfined aquifer because water from the surface can drain down to the aquifer. The Troutdale Sandstone and the Sand and Gravel Aquifers are considered confined aquifers because there is a solid layer of rock that doesn't let water pass. All of the wells in Wood Village draw water from one of the confined aquifers.

What happens when water is pumped from the well?

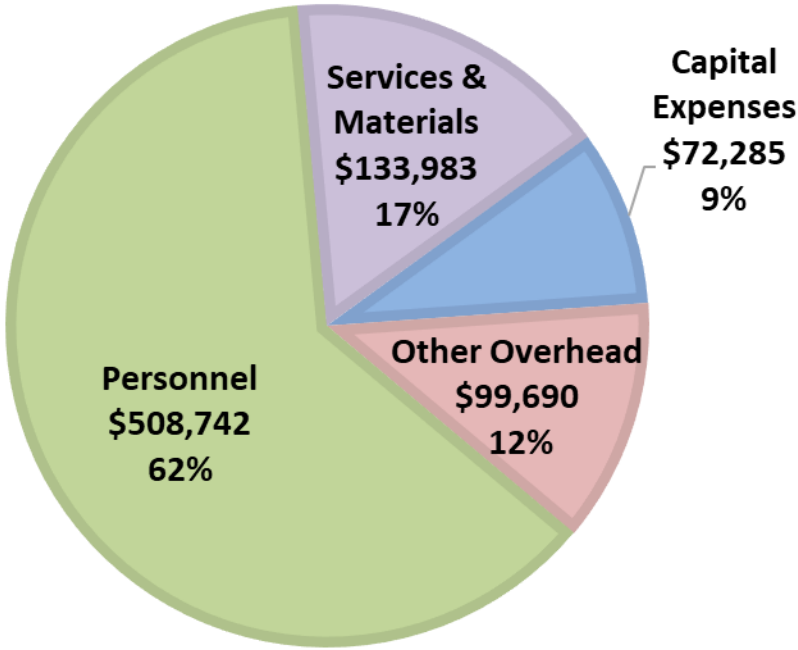
Water pumped from the wells is treated with sodium hypochlorite to kill any bacteria that might be present. Once treated, the water enters our system and is stored in the City's three reservoirs.

Maintaining the Water System

It takes a lot to maintain our water system. The Public Works team works hard to make sure you have clean water to drink and that fire hydrants are ready for fire emergencies. Daily routine tasks include inspecting our three wells, testing chlorine levels, and monitoring of reservoir levels. Throughout the year our team inspects vaults, exercises control valves, greases pumps, flushes hydrants and samples water for contaminants, among many other necessary tasks to keep our system running effectively.

As you can imagine, it takes a lot of resources to maintain a healthy water system. The City does its best to provide high quality services while keeping costs low as possible. You can learn more about our water system in the Water Master Plan and more about the City’s finances in the Annual City Budget and Comprehensive Annual Financial Report. All of these documents can be found under the “Departments” section on our webpage at www.woodvillageor.gov.

FY 2020-21 WATER BUDGETARY EXPENSE



99% of Water Fund revenues come from water related fees





Keeping Our Water Safe

In order to ensure that tap water is safe to drink, the EPA and OHA create and enforce regulations which limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).



Protecting Against Cross Contamination!

Water systems depend on water pressure to keep water flowing in the proper direction through the pipes. However, anything that causes a drop in water pressure can create a reverse flow from the customer's plumbing system back into the public water system. This is called backflow. Backflow can also occur when the customer's water system has a higher pressure than the public water system. The drinking water system can become unsafe whenever backflow occurs and the plumbing system comes in contact with harmful or objectionable substances. Such "cross connections" are created by people unaware of the potential for backflow.

Cross connections could cause contaminated water and food products, disabling illness, and even death in some extreme cases!

How can backflow be prevented?

The City of Wood Village has a cross connection control program as required by OHA's Drinking Water Program. It includes the elimination or protection of all cross connections by approved methods or approved equipment called backflow prevention assemblies. The different types of methods or backflow prevention assemblies used are based on what is known as the degree of hazard.

The City of Wood Village works hard to supply customers with safe, clean drinking water. With an understanding of the hazards associated with cross-connections and backflow, **you can help** us protect our drinking water.

Where are cross connections found?

Whenever a plumbing fixture is connected to the drinking water supply, a potential cross connection exists. Fortunately, many of the plumbing fixtures have built-in backflow protection. Examples of cross connection that can lead to backflow are:

- Wash basins and service sinks
- Hose bibs
- Attachment to hoses to apply weed killer or fertilizer or to flush anti freeze
- Irrigation or lawn sprinkler systems
- Swimming pools and spas
- Solar heat systems
- Fire sprinkler systems
- Photo developing equipment
- Laboratory equipment
- Food and beverage processing equipment
- Boilers

What Causes Discolored Water?

Water can sometimes become discolored, or turbid, due to tiny particles of naturally occurring minerals such as manganese or iron which has oxidized after mixing with water. Under normal conditions, these particles lie undisturbed on the bottom of the pipes. When a disturbance occurs such as a water pipe break, it causes the water in the pipes to flow much faster than normal which causes particles to be picked up off the bottom of the pipe and carried into the water. This can happen due to a broken water main, a fire in the neighborhood, routine flushing, or anything that causes the water in the pipes to move faster.

Health Safety of Discolored Water

It might not be nice to look at, but our labs have never found any harmful bacteria and this discolored water is safe to drink. If you see discolored water, we will gladly test it for free. Call us at 503-667-6211 and we can usually respond the same day.

Let the Water Clear

Flush using your cold water tap until the water runs clear. Typically, as you flush, the water will clear. In rare cases, it may take longer for water to run clear. Please try not to use your hot water until the water clears, this will keep sediment out of your water heater.

Laundry Stains from Discolored Water

Do not add bleach, it will make the stain harder to remove. These laundry stains can be removed with a special cleaning agent called "Rover." If you have stained laundry as a result hydrant flushing, please call us at 503-667-6211 and request some "Rover." It's added to your wash just like detergent. Please read the instructions that are included.



Water Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include

- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Microbial contaminants, such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.



Water Source Samples

Wood Village's drinking water comes from three wells. Test results for water samples taken from these wells are shown below. Note that Well 1 is inactive and is not subject to chemical sampling requirements. See page 2 for definitions.

Contaminant:	Description		Testing Frequency	Contaminant Source
NITRATE	Chemical compound which is common part of fertilizers.		Annually Last Test: 11/10/2021	Fertilizer runoff, sewage leaks, erosion of natural deposits.
	Well #	Results (ppm)	Ideal Goal (EPA's MCLG)	Action Level (EPA's MCL)
	2	2.48	10 ppm	10 ppm
	3	0.481		
	4	LOQ		

Contaminant:	Description		Testing Frequency	Contaminant Source
NITRITE	Chemical compound which is a part of fertilizers.		Every 9 Years Last Test: 8/6/2013	Fertilizer runoff, sewage leaks, erosion of natural deposits.
	Well #	Results	Ideal Goal (EPA's MCLG)	Action Level (EPA's MCL)
	2	LOQ	1 ppm	1 ppm
	3	LOQ		
	4	LOQ		



Water Source Samples (continued)

Contaminant:	Description		Testing Frequency	Contaminant Source
GROSS ALPHA	Type of energy released when certain radioactive elements decay or break down.		Every 9 Years Last Test: 9/9/2014	Erosion of natural deposits
	Well #	Results	Ideal Goal (EPA's MCLG)	Action Level (EPA's MCL)
	2	LOQ	Zero	15 pCi/L
	3	LOQ		
	4	LOQ		

Contaminant:	Description		Testing Frequency	Contaminant Source
RADIUM 226/228	Isotopes of the atomic element Radium.		Annually Last Test: 9/9/2014	Erosion of natural deposits
	Well #	Results	Ideal Goal (EPA’s MCLG)	Action Level (EPA’s MCL)
	2	LOQ	Zero	5 pCi/L
	3	LOQ		
	4	LOQ		

Contaminant:	Description		Testing Frequency	Contaminant Source
URANIUM	An atomic element that emits toxic radiation.		Annually Last Test: 9/9/2014	Erosion of natural deposits
	Well #	Results	Ideal Goal (EPA’s MCLG)	Action Level (EPA’s MCL)
	2	LOQ	Zero	30 µg/L
	3	LOQ		
	4	LOQ		

Water Source Samples (continued)

Contaminant:	Description		Testing Frequency	Contaminant Source
TOTAL COLIFORMS	Fecal matter (poop).		Annually Last Test: 11/23/2021	Human and animal fecal waste.
	Well #	Results	Ideal Goal (EPA's MCLG)	Action Level (EPA's MCL)
	2	Absent	Zero Positive Tests	Fewer than 5% of samples test positive
	3	Absent		
	4	Absent		

Contaminant:	Description		Testing Frequency	Contaminant Source
ARSENIC	An atomic element that is extremely toxic.		Every 9 Years Last Test: 6/23/2015	Occurs naturally in rocks and soil. Also from industrial waste.
	Well #	Results (ppb)	Ideal Goal (EPA's MCLG)	Maximum Allowed (EPA's MCL)
	2	0.8	None	10 ppb
	3	0.7		
	4	0.9		

Contaminant:	Description			
OTHER CHEMICAL CONTAMINANT	The EPA regulates testing for 62 additional contaminants. These are categorized into three groups.			
	Category	Results	Testing Frequency	Last Test
	Inorganic Contaminants	No Violations	9 years	8/6/2013
	Volatile Organic Contaminants	No Violations	3 years	9/28/2017*
	Synthetic Organic Contaminants	No Violations	3 years	8/6/2019

*Volatile Organic Contaminants tested on 3/14/2022 and the table will be updated in next year's report. There were no violations.

New Testing Regulations: PFAS (Per- and Polyfluoroalkyl Substances) and Lithium

Contaminant:	Description		Testing Frequency	Contaminant Source
PFAS	A group of synthetic chemicals that have been in use since the 1940s		Special Testing Last Test: 9/9/2014	Found in a many consumer and industrial products
	Well #	Results	Ideal Goal (EPA’s MCLG)	Action Level (EPA’s MCL)
	2	LOQ	Not determined	Not determined
	3	LOQ		

The EPA published the fifth Unregulated Contaminant Monitoring Rule on December 27, 2021. This rule requires sample collection for 29 polyfluoroalkyl substances (PFAS) and lithium in a 12 month period some time between 2023 and 2025. This action provides EPA and other interested parties with data on the national occurrence of these contaminants in drinking water.

In October 2021, the OHA reached out to the City of Wood Village to collect samples to test for 25 PFA compounds. In April, the Oregon Department of Environmental Quality took samples from Well 2 and Well 3. These tests did not detect any PFAS.

The results of the 12 month sampling period for the full panel of PFAS and Lithium will be included in future Water Quality Reports.



Water Distribution System Samples

Test results for water samples taken from the distribution system are shown below. Wood Village has 9 sample stations across the City to test water throughout the system. The City's water system is composed of almost 12 miles of pipelines, 695 service connections, and 115 fire hydrants. Our Public Works Crew works hard every day to keep this system functioning. See page 2 for definitions.

Contaminant:	Description	Testing Frequency	Contaminant Source
TTHM	Chemicals formed by disinfecting drinking water with products like chlorine.	Annually Last Test: 8/11/2021	Byproduct of drinking water disinfection
	Results	Ideal Goal (EPA's MCLG)	Action Level (EPA's MCL)
	LOQ	N/A	80 ppb

Contaminant:	Description	Testing Frequency	Contaminant Source
HAA5	Chemicals formed by disinfecting drinking water with products like chlorine.	Annually Last Test: 8/11/2021	Byproduct of drinking water disinfection
	Results	Ideal Goal (EPA's MCLG)	Action Level (EPA's MCL)
	LOQ	N/A	60 ppb

Contaminant:	Description	Testing Frequency	Contaminant Source
TOTAL COLIFORMS	Fecal matter (poop).	Every month at 4 rotating sites across the city.	Human and animal fecal waste.
	Results	Ideal Goal (EPA's MCLG)	Action Level (EPA's MCL)
	No Violations	Zero samples test positive	Fewer than 5% of samples test positive

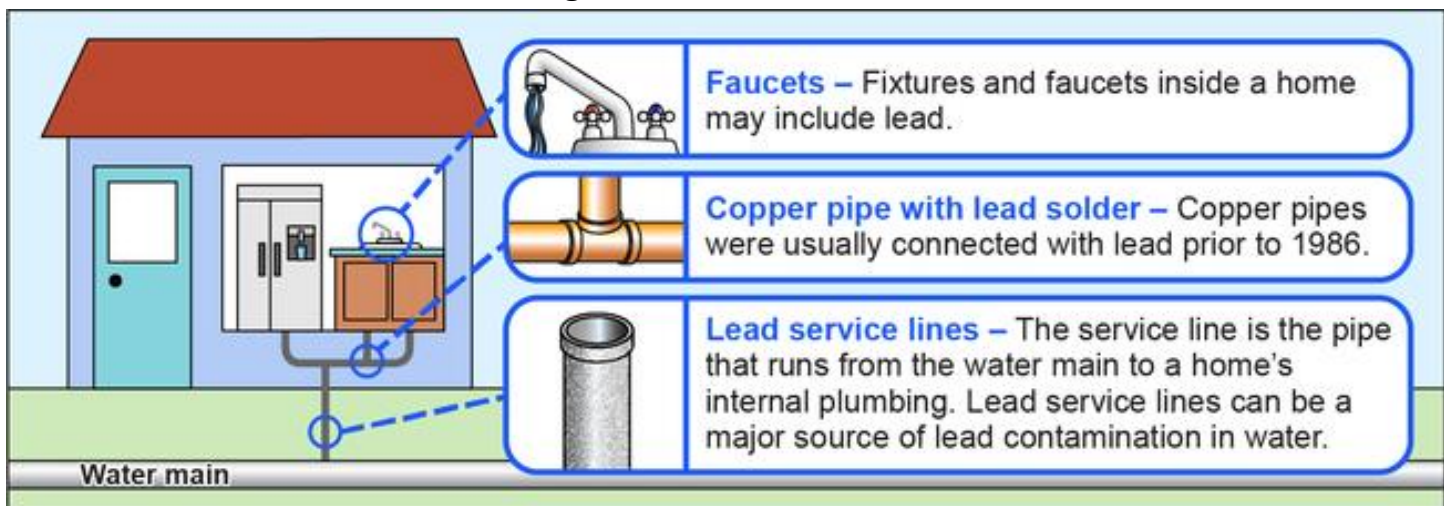
Lead and Copper

In 1991, the EPA published a regulation which requires water systems to monitor lead and copper levels in drinking water at customer taps every three years. The OHA Oregon Drinking Water program requires that the 90th percentile sample for lead be less than 15.5 ppb and copper be less than 1.35 ppm. Wood Village’s 90th percentile results for 2020 were below both of these standards. See results in the table below and in the chart on page 15.

	LEAD	COPPER
Average	0.34 ppb	0.014 ppm
Min	LOQ*	0.008 ppm
Max	1.4 ppb	0.042 ppm
Ideal Goal (MCLG)	Zero	1.3 ppm
Action Level (MCLG)	15 ppb	1.3 ppm

20 homes sampled between 8/11/2020 and 9/29/2020
Homes selected based on potential of lead and copper contamination. The most common source would be lead solder used in plumbing construction from 1982 or earlier.

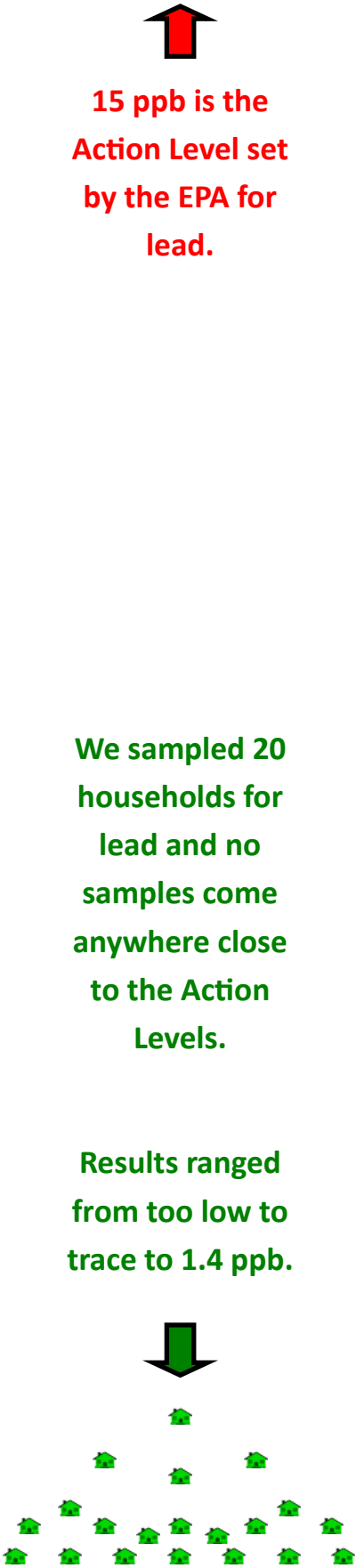
Common Sources of Lead in Drinking Water within Homes and Residences



Source: GAO adaptation of Environmental Protection Agency information. | GAO-21-78

Lead Test Results

15.0
14.5
14.0
13.5
13.0
12.5
12.0
11.5
11.0
10.5
10.0
9.5
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
LOQ



Copper Test Results

1.4
1.2
1.0
0.8
0.6
0.4
0.2
LOQ



Want to get involved with the City?

*There are many opportunities to support the City of Wood Village!
Please contact us for more information.*

City Council Meetings:

Typically held the second and fourth Tuesday of the month. Check our website for more information.

Boards and Commissions:

The City runs with the support and guidance of its citizens and stakeholders. Positions are held every two years. Contact us if you are interested in joining.

- ⇒ Budget Committee
- ⇒ Parks Committee
- ⇒ Planning Commission and Design Board

Want to volunteer for community events?

The City sponsors many wonderful events throughout the year, such as cleanup events, food assistance drives, recreational activities, and more.

Questions? Comments?

We want to
hear from you!

Address: 24200 NE Halsey Street
Wood Village, OR 97060

Phone: 503-667-6211

Email: city@woodvillageor.gov

Website: www.woodvillageor.gov

Public Works Director: John Niiyama

City Manager: Greg Dirks

Mayor: T. Scott Harden

MISSION STATEMENT

A unique, diverse, and inclusive small city with exemplary public services, fiscal responsibility, and leadership providing a safe, livable community which promotes business vitality and growth.

Goal 1: A safe, clean, inclusive community with a sense of pride, quality housing, and strong identity.

Goal 2: Exemplary police, fire and building services.

Goal 3: High quality, cost-effective public utilities, parks and events.

Goal 4: Long-term financial stability, economic vitality and growth.

Goal 5: A work environment that develops and encourages employees and rewards their creativity and innovation.

Goal 6: Effective local, state and regional partnerships.

Goal 7: Responsible environmental leadership.

Goal 8: Intentional Community Engagement.